March 18, 2021 - Fresh Pond Reservation Master Plan Advisory Board Meeting Minutes (conducted

via Zoom)

Submitted: Sam Corda – September 23, 2021

<u>Advisory Board Members in Attendance:</u> Janice Snow (Chair), David Kaplan, Janet Burns, Deborah Masterson, Claudia Thompson, Sophia Emperador, Ann Roosevelt, David Lyons, Jennifer Letourneau, Adam Corbeil, Candace Young and Susan Agger

Advisory Board Members Not in Attendance: Jim Barton

<u>Water Department in Attendance:</u> Sam Corda, Ed Dowling, Jean Rogers, Tim Puopolo, Fred Centanni and Vincent Falcione

Others in Attendance: Duke Bitsko and Ken Wagner – Black's Nook

Meeting opened at 6:05 pm Meeting Minutes: S. Corda

Item 1: Review Agenda

The order of the items was adjusted to move the Black's Nook presentation first.

Item 2: Black's Nook Next Steps (Hatch)

Prior to the meeting Janice Snow distributed several historical maps and excerpts on dredging Black's Nook.

Duke Bitsko and Ken Wagner gave the updated Black's Nook Presentation below. This presentation is based on questions and comments from the January 2021 meeting.

Black's Nook Presentation

The revised rehabilitation alternatives:

- 1. Manage Aquatic Vegetation Hydro-Rake and Benthic Barriers.
- 2. Manage Aquatic Vegetation Chemical Treatment and Phosphorus Inactivation.
- 3. Shallow Dredging 2' Depth.
- 4. Deeper Dredging 4' Depth.

The decision matrix for these revised alternatives:

		WATE	R QUALITY IMPRO	OVEMENTS	HABITAT IMPROVEMENTS					_			
No	ALTERNATIVE	Returns BN to Open Water Body	Meet Class B Water Quality Standards	Address Category 5 Impaired Water Body Status	Benthic Community	Fishery	(Avian) Birds	(Anuran) Amphibians	Bats	Special Considerations	20-Year Life Cycle Cost		
1	Hydro Rake and Benthic Barriers	Y	P	Р	Р	P	Р	P	Р	Will limit plants where applied but would not cover whole pond due to impacts on benthic community; requires maintenance.	\$170,000	,	
2	Chemical Treatment and Phosphorus Inactivation	V	P	Р	Р	Р	Р	P	P	Would need more than one herbicide for range of species present.	\$80,000		<u>K</u>
3	Shallow Dredging (2')	Y	Y	Y	Y	Y	Y	Y	Y	Affects all aspects of the pond, allows for overall restoration and enhancement.	>\$300,000		P
4	Deeper Dredging (4')	Y	Y	Y	Y	Y	Y	Y	Y	Same as for shallow dredging but provides longer benefits and will expand habitat for some species and limit regrowth of plants.	>\$600,000		

All members were opposed to herbicide (chemical) treatment, and glyphosate in particular. Ken Wagner showed slides of the pond dredging process to restore open water in Arlington, Newton and Gardner, MA. He noted that the recovery period is about 1.5 years. With the 2 ft. dredge, barring any significant contamination, sediment disposal could be done on-site within the reservation.

Most of the members were in favor of the 2 ft. dredge (about 75,000 cubic yards, 25 % peat) as the preferred option. More work will need to be performed to refine the recommended option. Janice Snow preferred the 4-foot dredge which offers additional decades of open water and expanded pond habitat for some species while understanding that the short-term cost is much greater than the 2 ft. dredge and that the extra dredged material would have to be deposited off site. Claudia Thompson was concerned with the impacts to wildlife and its habitat resulting from the dredging process and preferred to start with hydro raking.

Jen Letourneau asked about access to the on-site dredge deposit location and the estimated cost of off-site deposit of material. K. Wagner estimated \$30 to \$40 a cubic yard and a period of 2.5 months following receipt of permits to complete the 2 ft. dredge. Dr. Wagner recommended dredging during the winter to limit damage to wildlife and speed restoration planting. The earliest the Water Department expects funding to be available is in the Winter of 2023.

Item 3: Little Fresh Pond Shoreline Access Reconstruction

Little Fresh Pond Shoreline Reconstruction Options

The presentation was well received with the following comments:

- The birch tree should remain
- There should be fewer boulders, more randomly placed
- Project design elements should be discussed with the City's ADA compliance officer.
- Members preferred timbers over granite and 2 vs. 3 timber steps.
- Timber edges should be rounded vs. square.

Item 4: Meeting Minutes

<u>Candace Young moved, and Sophia Emperador seconded the meeting minutes from October 22, 2020 as</u> amended. The vote was unanimous in favor of the motion.

The minutes of the January 21, 2021 were deferred to the May meeting.

Item 5: Watershed Manager's Report

Signage should be added on the DCR Greenway to define the sensitive Water Supply Area/ Pine Forest and provide directional information as well. The signage should be located at the new split and at the Watertown line.

Item 6: Golf Course Landscape Report

Adam Corbeil stated that the golf course did open during the pandemic with 3600 vs. 4500 rounds of golf. Walkers were welcome to use the golf course during the off-season this year. Bathrooms were closed and there were cart limits. No Covid infections were reported. Invasive plants have been detected in the buffer zone between the golf course and houses. Golf management will work with homeowners to remove the invasives.

Item 7: Volunteer Report

Tim Puopolo updated the Board that all City, school, private company and steward program events, such as the planned Earth and Arbor Day programs, were cancelled starting in March of 2020 through March of 202, due to the Pandemic. A new cartographic program allows us to coordinate with volunteer groups and locate work sites. Earthwise, a citizen science group was able to document meadow life at the Reservation and produce a report.

Friends of Fresh Pond continued their restoration work masked and socially distanced as documented in Elizabeth's Wyle's report below.

Candace Young, the Advisory Board's representative to the Friends' group noted that in addition to Covid, variable weather conditions and existing poor soil conditions complicated their work. Many areas of the Woodland site contain chunks of brick and other debris buried in the soil.

The Woodland Restoration Projects

The "Habitat" and the "Corner" at Fresh Pond Reservation 2020 Report

The year 2020 will be remembered by most people as a time of disrupted schedules, curtailed activities, and social anxiety. But for volunteers in Fresh Pond Reservation's Woodland Habitat Projects, our Tuesday workdays were "business as usual." We were readily able to continue our work of planting, weeding, watering, pruning and spreading mulch, even while wearing masks and social distancing. The satisfaction of helping create a habitat of native plants, the calming sensation of spending time in the woods, and the simple pleasure of physical labor combine to create a rewarding experience that draws us back week after week and year after year.

With this year's travel limitations keeping us all close to home, we worked a record-breaking total of more than 1000 hours. Our main concern was with the drought that lasted from May through September and left us with a precipitation deficit of about 8 inches, 40 percent below average. Much of our time during that period was spent hauling water-filled gallon milk jugs in our trusty wagons. We focused on watering the plants we had added earlier in the spring, that had not had time to develop root systems extensive enough to survive dry conditions. To our relief, almost all of those plants survived and added new growth. Our watering efforts were enhanced by our addition around each plant of a skirt of leaf mold mulch from the enormous pile of leaves that was left for us last fall by the Water Department's landscape crew. Leaves on the ground provide moisture retention, temperature control (summer and winter), weed control, and the release of essential nutrients into the soil: nature's perfect plant care substance.

Most of our work this year was done in the quarter-acre area we call Richard's woods. Volunteer Richard Bosel in 2017 cleared the woods of a near-monoculture of invasive common buckthorn, leaving an open understory – the equivalent of a blank canvas for an artist, and an irresistable opportunity for us gardeners. We started our planting efforts that fall by scattering the seeds of white wood asters and blue-stemmed goldenrods that were growing nearby in a similarly shady area. The following spring, native blue dooryard violets arrived in large numbers without our help. Later in the spring, we began planting trees and some shrubs. In 2019 and 2020 we added more trees and a variety of shrubs, ferns, and perennial wildflowers. A list of plants added in 2020 is included below.

Thanks for the Support of Water Department Staff: Vince Falcione, Dave Kaplan, Brian Mulrenan, and Tim Puopolo, as well as the landscape crew members who delivered leaves to our leaf mulch piles.

Thanks to The Friends of Fresh Pond Reservation for covering the cost of various expenses, including the purchase of planting materials.

Thanks also to the volunteers who donated plants they purchased for the projects, donated plants they grew from seeds, and donated plants from their own gardens.

Plants Added to the Woodland Habitat Projects in 2020

Woody Plants

Number	Common Name	Botanical Name	Source		
3	Gray Birch	Betula populifolia	Water Department		
4	Bitternut Hickory	Carya cordiformis	Elizabeth		
3	Shagbark Hickory	Carya ovata	Elizabeth		
7	Red-stemmed Dogwood	Cornus sericia	Water Department		
12	Witch Hazel	Hamamelis virginiana	Water Department		
9	Winterberry Holly	Ilex verticillata	Water Department		
2	Swamp White Oak	Quercus bicolor	Water Department		
6	Swamp Azalea	Rhododendron viscosum	Water Department		

Ferns

33	2 Interrupted Ferns	Osmunda claytoniana	Candace		
6	4 Marginal Wood Ferns	Dryopteris marginalis	Candace		
32	2 Virginia Chain Fern	Woodwardia virginica	Candace		
30	Cinnamon Ferns (roots)	Osmunda cinamomea	Elizabeth		
10	Maidenhair Ferns	Adiantum pedatum	Elizabeth		

Other Perennials

11	American Spikenard	Aralia racemosa	Elizabeth					
4	Butterfly Weed	Asclepias tuberosa	Elizabeth					
10	Large-leaved Aster	Eurybia macrophylla	Elizabeth					
8	New England Blazing Star	Liatris scariosa	Elizabeth					
12	Silverrod	Solidago	Elizabeth					
12	Zigzag Goldenrod	Solidago flexicaulis	Elizabeth					
5	Sweet Goldenrod	Solidago odora	Elizabeth					
4	Forest Goldenrod	Solidago arguta	Elizabeth					
15	Pennsylvania Sedge	Carex pensylvanica	Elizabeth					
7	Woodland Sunflower	Helianthus divaricatus	Elizabeth					
7	Swamp Milkweed	Asclepias incarnata	Elizabeth					
4	Common Cinquefoil	Potentilla simplex	Elizabeth					
8	Slender Mountain Mint	Pycnanthemum	Elizabeth					
		tenuifolium						

The board briefly discussed an unpermitted "guerilla" art installation in the pine stand at Lusitania Meadow.

Item 8: Pat Pratt Memorial Grove Update

Ann Roosevelt moved, and Deborah Masterson seconded the motion to thank Dave and Vinnie for recommending that we locate a memorial grove and plant three (3) White Oak trees within Kingsley Park to honor and remember the contribution by Pat Pratt to Fresh pond Reservation. The vote was unanimous in favor of the motion.

Item 9: Preliminary for May 20, 2021 Meeting

Watershed Mangers Report, Updates on Huron Ave and Pine Forest, Pat Pratt Memorial Grove site selection and Maynard Ecology Center Report.

Item 10: Public Comment

There was no public comment.

<u>David Kaplan moved, and Susan Agger seconded the motion to adjourn the meeting. The vote was unanimous in favor of the motion. The meeting was adjourned at 8:30pm.</u>